

REMARKS/ARGUMENTS

Status of Claims

Claims 1-5, 9, 10, 14, 15, 19-30, 34-36 remain in the application.

Claims 1, 2, 5, 9, 10, 14, 15, 24, 26, 28, 34, and 35 have been amended.

Claims 6-8, 11-13 and 16-18 have been cancelled.

Claims 31, 32, 33 and 37 remain cancelled.

Amendments to the Claims

Claim 1 has been amended by adding the limitation of “identifying at least one dominant source which impacts each identified optical effect.” Support for this amendment can be found at page 11 lines 9-12.

Claim 1 has also been amended by indicating that the method includes identifying at least one base variable upon which each identified dominant source depends, and approximating a value for the impact of each identified optical effect on the performance of a signal as a function of each identified dominant source and identified base variable. Support can be found at Equation 2 on page 15.

A similar amendment has been made to claims 24, 26, 26, 28, 34 and 35.

Claim 2 has been amended by indicating that the recalculating step in the method includes calculating the impact of each identified dominant source based on the calculated value of each identified base variable. Support for the amendment can be found at Equation 2 on page 15.

Claims 5, 10, and 15 have been amended to improve the readability of the claims. Support for the amendments can be found in cancelled claims 6-8, 11-13 and 16-18 respectively.

35 U.S.C. 102 Rejections

In the Final Action, The Examiner has maintained the rejection of claims 1-3, 5-17, 20, 24-26, 28 and 34-36 as not complying with paragraph 35 U.S.C. § 102(e). The rejection is based on the claim being anticipated by Levandovsky et al. (U.S. patent no. 7,095,956” hereinafter “Levandovsky”).

Claim 1 as amended reads:

1. In a network comprising a plurality of nodes interconnected by optical fiber segments, a method of determining the viability of a signal path through the network, comprising the steps of:

identifying at least one optical effect that impacts the viability of the signal path;

identifying at least one dominant source which impacts each identified optical effect;

identifying at least one base variable upon which each identified dominant source depends;

approximating a value for the impact of each identified optical effect on the performance of a signal as a function of each identified dominant source and each identified base variable;

assigning a performance value to the signal at its introduction into the network;

for each successive segment in the signal path, recalculating the impact of each identified optical effect on the performance value as the signal passes through the segment; and

comparing the resulting performance of the signal after passage along the signal path against an acceptable threshold to determine the path's viability.

The Examiner has rejected claim 1 on the basis that it is anticipated by Levandovsky and it and therefore fails to comply with paragraph 35 U.S.C. § 102(e).

Claim 1 as amended includes the limitation "identifying at least one dominant source which impacts each identified optical effect". Support for this limitation is provided at page 11, lines 9-12 as follows:

It is known that, for certain systems, dispersion, self-phase modulation, cross-phase modulation and four-wave mixing effects dominate the overall signal distortion. Different systems will exhibit different dominant effects.

The above limitation is not taught by Levandovsky. Therefore, Levandovsky does not include all the elements recited by claim 1, and as such, Levandovsky does not anticipate claim 1. The Applicant respectfully requests that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. 102(e), and the rejection of claims 2-3, 5, 9, 10, 14, 15 and 20 which depend thereon.

Claim 24 contains the limitations:

a quantifier to determine the value of at least one identified dominant source upon which at least one identified optical effects that impact the viability of the signal path is dependent;

a quantifier to determine the value of at least one identified base variable upon which each identified dominant source is dependent;

For the same reasons as mentioned in respect of claim 1, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 24 under 35 U.S.C. 102(e), and the rejection of claim 25 which depends thereon.

Claim 26 contains the limitations:

a quantifier to determine the value of at least one identified dominant source upon which at least one identified optical effects that impact the viability of the signal path is dependent;

a quantifier to determine the value of at least one identified base variable upon which each identified dominant source is dependent;

For the same reasons as mentioned in respect of claim 1, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 26 under 35 U.S.C. 102(e).

Claim 28 contains the limitations:

a quantifier to determine the value of at least one identified dominant source upon which at least one identified optical effects that impact the viability of the signal path is dependent;

a quantifier to determine the value of at least one identified base variable upon which each identified dominant source is dependent;

For the same reasons as mentioned in respect of claim 1, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 28 under 35 U.S.C. 102(e).

Claim 34 includes the limitations of:

determine the value of at least one identified base variable upon which at least one identified dominant source that impacts at least one identified optical effect is dependent;

determine the value of the impact of each identified dominant source for each identified optical effect;

For the same reasons as mentioned in respect of claim 1, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 34 under 35 U.S.C. 102(e).

Claim 35 includes the limitations of:

determine the value of at least one identified base variable upon which at least one identified dominant source that impacts at least one identified optical effect is dependent;

determine the value of the impact of each identified dominant source for each identified optical effect;

For the same reasons as mentioned in respect of claim 1, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 35 under 35 U.S.C. 102(e).

Claim 36 includes the limitations of:

determine the value of at least one identified base variable upon which at least one identified dominant source that impacts at least one identified optical effect is dependent;

determine the value of the impact of each identified dominant source for each identified optical effect;

For the same reasons as mentioned in respect of claim 1, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 36 under 35 U.S.C. 102(e).

As claims 6-8, 11-13, 16 and 17 have been cancelled from the application, the rejection of these claims has been rendered moot.

35 U.S.C 103 Claim Rejections

The Examiner has rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Levandovsky in view of Solheim et al. (U.S. Patent 7,190,902) hereinafter "Solheim".

The law on obviousness under 35 U.S.C. 103 was recently addressed in *KSR Int'l v. Teleflex, Inc.*, No. 04-1350, slip op. at 14 (U.S., Apr. 30, 2007). Following this, examination guidelines were released on October 10, 2007 in regards to determining obviousness under 35 U.S.C. 103. According to these guidelines, the framework for the objective analysis for

determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.* 383 U.S. 1,148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

The *Graham* factors, including secondary considerations when present, are the controlling inquiries in any obviousness analysis. The *KSR* case states that there must be “an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” According to *KSR*, for the Patent Office to properly combine references in support of an obviousness rejection, the Patent Office must identify a reason why a person of ordinary skill in the art would have sought to combine the respective teachings of the applied references.

- (1) The Examiner did not properly determine the scope and content of the prior art

Claim 4 depends on claim 1.

As noted above in connection the argument submitted in respect of claim 1, Levandovsky does not include the limitation of “identifying at least one dominant source which impacts each identified optical effect.” Solheim does not cure the deficiency in Levandovsky.

It is therefore submitted that the Examiner has not properly determined the scope and content of the prior art. It is therefore not necessary to have regard to the other two *Graham* factors.

For all of the foregoing reasons, Applicant submits that the Examiner has failed to properly determine the scope and content of the prior art and as a result, has not met the first of the *Graham* factors mentioned by the U.S. Supreme Court in *KSR*.

In view of the foregoing, Applicant respectfully requests that the rejection of claim 4 under 35 USC 103(a) claims be withdrawn.

The Examiner has rejected claims 18 under 35 U.S.C. 103(a) as being unpatentable over Levandovsky in view of Bickham et al. (U.S. Patent no. 6,943,935).

Claim 18 has been cancelled rendering this rejection moot.

The Examiner has rejected claim 19 under 35 U.S.C. 103(a) as being unpatentable over Levandovsky in view of Denkin et al. (U.S. patent no. 6,980,740).

Claim 19 depends on claim 1.

As noted above in connection the argument submitted in respect of claim 1, Levandovsky does not include the limitation of “identifying at least one dominant source which impacts each identified optical effect.” Denkin et al. does not cure the deficiency in Levandovsky.

The Examiner has rejected claims 21-23 under 35 U.S.C. 103(a) as being unpatentable over Levandovsky.

Claims 21-23 depend on claim 1.

As noted above in connection the argument submitted in respect of claim 1, Levandovsky does not include the limitation of “identifying at least one dominant source which impacts each identified optical effect.”

The Examiner has rejected claims 27 and 29-30 under 35 U.S.C. 103(a) as being unpatentable over Levandovsky in view of Beine et al. (U.S. Patent no. 6,701,087).

Claim 27 depends on claim 26.

As noted above in connection the argument submitted in respect of claim 26, Levandovsky does not include the limitations of

a quantifier to determine the value of at least one identified dominant source upon which at least one identified optical effects that impact the viability of the signal path is dependent;

a quantifier to determine the value of at least one identified base variable upon which each identified dominant source is dependent;

Beine et al. does not cure the deficiency in Levandovsky.

Claims 29 and 30 depend on claim 28.

As noted above in connection the argument submitted in respect of claim 28, Levandovsky does not include the limitations of:

a quantifier to determine the value of at least one identified dominant source upon which at least one identified optical effects that impact the viability of the signal path is dependent;

a quantifier to determine the value of at least one identified base variable upon which each identified dominant source is dependent;

Beine et al. does not cure the deficiency in Levandovsky.

In summary, it is therefore submitted that the Examiner has not properly determined the scope and content of the prior art. It is therefore not necessary to have regard to the other two *Graham* factors.

For all of the foregoing reasons, Applicant submits that the Examiner has failed to properly determine the scope and content of the prior art and as a result, has not met the first of the *Graham* factors mentioned by the U.S. Supreme Court in *KSR*.

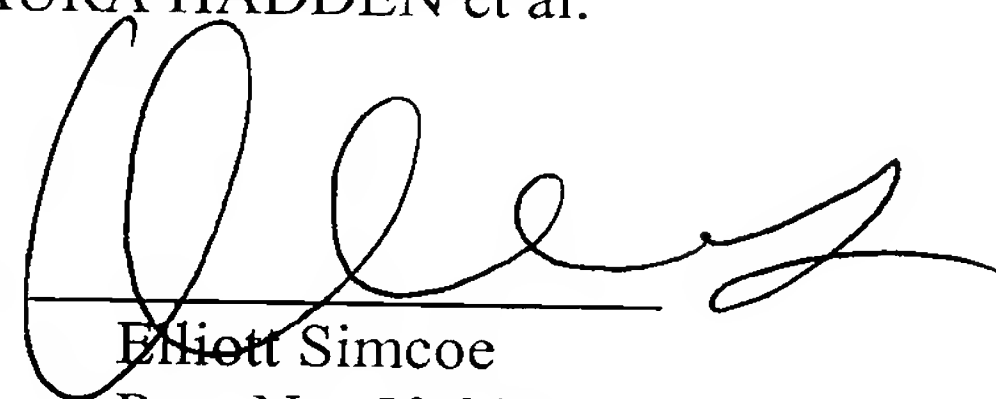
In view of the foregoing, Applicant respectfully requests that the rejection of claims 4, 18, 19, 21-23, 27, and 29-30 under 35 USC 103(a) claims be withdrawn.

In view of the foregoing, early favourable consideration of this application is earnestly solicited.

Respectfully submitted,

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By

A handwritten signature in black ink, appearing to read 'Elliott Simcoe', written over a horizontal line.

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